CARROLLTON WATER TOWER
Northwest Corner of South Main Street and 7th Street
Carrollton
Greene County
Illinois

HAER No. IL-1200

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA
REDUCED COPIES OF ORIGINAL DRAWINGS
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HISTORIC AMERICAN ENGINEERING RECORD
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HISTORIC AMERICAN ENGINEERING RECORD

CARROLLTON WATER TOWER

HAER No. IL-1200

Location: Northwest Corner of South Main Street and Seventh Street, Carrollton, Greene County, Illinois.

Present Owner: City of Carrollton

Present Use: City water tower

Significance: The Carrollton Water Tower stands as an example of a disappearing resource in the Midwest. These steel riveted water towers were constructed from the 1920s through the 1950s and are quickly being demolished and replaced with larger state of the art water towers. This tower represents a style of water tower and small-town water service that was prevalent in the early to middle twentieth century.

Historians: Christopher Flynn and David Halpin, Public Service Archaeology and Architecture Program, June, 2020.

1. Research Strategy: Research undertaken to document the Carrollton water tower included archival, field, and report preparation. Archival research was undertaken prior to, and during field investigations, and included examination of local histories and records as well as known architectural documents to develop an architectural and historical context for the water tower. The field investigations also included photographing and documenting structural elements of the water tower in their present conditions.

2. Actual Research Process: Contact was made with individuals at the City Treasurer's Office, and the Public Works Department at City Hall in Carrollton. Benton and Associates, Inc. supplied an electronic copy of the original 1924 plan and elevation of the water tower. City Council Minutes for 1924 and 1925 were examined at City Hall and *The Carrollton Patriot* newspapers for 1924 and 1925 were consulted at the Greene County Historical and Genealogical Society.

Project Information:

The 100,000-gallon Carrollton water tower is scheduled to be replace by a new larger water tower. The project will utilize a Public Water Supply Loan, partially funded by the U.S. Environmental Protection Agency and administered by the Illinois Environmental Protection Agency. The undertaking is subject to review under Section 106 of the National Historic Preservation Act of 1966, as amended, 54 U.S.C. 306108 and its implementing regulations (36 CFR Part 800).

Illinois State Historic Preservation Office determined that the structure was eligible for listing on the National Register of Historic Places and required HAER documentation prior to demolition. The SHPO Log number for this undertaking is #011040419.

David Halpin conducted fieldwork, historical research, and compiled this report, Christopher Flynn conducted historical research, Susan Brannock-Gaul drafted the graphics, and Dr. Kevin McGowan served as Principal Investigator for the Public Service Archaeology and Architecture Program, Department of Anthropology, University of Illinois Urbana-Champaign.

Ben Halpern, independent professional photographer, took the black and white photography.

PART I. HISTORICAL INFORMATION

A. Physical Information:

1. **Dates of Construction:** 1924-1925

2. **Architects:** Chicago Bridge and Iron Works

3. **Builder, contractor, suppliers:** Chicago Bridge and Iron Works, Chicago, and H. J. Caldwell Engineering Company, Jacksonville, Illinois.

4. **Original plans and construction:** Electronic copies of two pages of the original plans were provided by CB&I Storage Tank Solutions, Inc., the successor to the Chicago Bridge and Iron Works. The plans are detailed line drawings of the structure and foundation with measurements and project details.

5. **Alterations and additions:** The Carrollton water tower appears to be little changed from the Chicago Bridge and Iron Works original drawings. The painter's platform depicted on the plans is not on the water tower, and the configuration of the balcony rail was

changed from cross bars to a single horizonal element. It is not known if the tower was constructed with these changes. The electrical service appears to have been upgraded over the years, and two antennae have been added to the roof.

B. Historical Context

1. Greene County

Greene County lies in the lower Illinois River Valley, in the area of west central Illinois east of the river known by Native Americans and early Euro-American settlers as the Sangamo, or Sangamon Country, from the Pottawatomie word for "land of plenty". Greene County is bordered on the north by Scott and Morgan counties, on the east by Macoupin County, on the south by Jersey County, and on the west by the Illinois River and Pike and Calhoun counties. It contains seven fractional townships, along the irregular western and southwestern borders, and fourteen full townships. The surface of the county is generally rolling, but hillier and somewhat broken in the western bluff regions. The county is well watered with an abundance of timber along the western bluffs and interior drainages. In addition to the Illinois River along the western border, the interior of the county is drained from east to west by Apple and Macoupin creeks and their many tributaries. Early settlers and travelers through the region discovered numerous springs in the bluffs and in scattered locations, and several mineral springs in the county became well known destinations for their curative powers.[1]

The territory that is now Greene County was home to the Kickapoo and Pottawatomie Native American tribes when the first French explorers claimed the vast region of Louisiana for France in the 1680s. Subsequent to French rule, Greene County became a possession of England, a portion of Illinois County, Virginia, and a part of the Northwest Territory. In 1809 it formed part of St. Clair County, Indiana Territory; in 1812 it became part of Madison County, Illinois Territory; in 1818 Madison County, State of Illinois; and in 1821 was established as Greene County, Illinois. As originally configured, Greene County included unorganized territory later detached to form Scott and Jersey counties, as well as portions of Morgan and Macoupin counties. The detachment and organization of Jersey County in 1839 reduced Greene County to its present boundaries.[2] The first American settlers of Greene County had been members of the Illinois Rangers, a militia formed at Goshen Settlement, in Madison County, during the War of 1812. After the war, John W. Huitt, Samuel and William Greene, Thomas Carlin, and others migrated up the Illinois River from established settlements at Goshen and Wood River to the timbered lands along Macoupin Creek, so that by 1815 several families had established themselves immediately south of the Macoupin. Among these were Daniel Allen and his three sons, Daniel Jr., John and James, as well as James and Paul Harriford, all natives of Tennessee. In 1816 the Allens moved about six miles west and established homesteads in Township

[1] Donnelley, Gassette & Loyd, *History of Greene County, Illinois* (Chicago, 1879), 221-223.
[2] Ibid. 112, 233, 235, 239, 248-250.

10 North, Range 12 West, in present day Kane Township, Greene County. Migration into the Sangamon Country surged in 1819 after the signing of the Treaty of Edwardsville, by which "Auguste Chouteau and Benjamin Stephenson, on the part of the United States, bought, of the Kickapoo Indians, ten million acres of land lying between the Illinois River on the Northwest, the Kaskaskia River on the southeast, the Kankakee River on the northeast, and the Mississippi River on the southwest". Between 1819 and 1821 a large swath of land across central Illinois was surveyed by the government and opened for settlement.[3]

By 1819 a sizeable settlement had been established south of Macoupin Creek on lands originally part of Greene County and later included in Jersey County. Among those who settled on the Macoupin were Mathilda, John and Wiley Greene, Davis Carter and Joseph Piggott from Kentucky, and Benjamin Allen, William Costly and Robert Means from Georgia; as well as John Loftin, John Gillham, Joseph White, Orman Beeman, Alfred Hinton, and John R. Black. Many early migrants chose to stay south of the creek, which often ran high and represented a barrier to travel back to population centers and markets to the south.[4] The first dwelling house north of Macoupin Creek was built by Samuel Thomas on a claim southwest of present-day Carrollton in August 1818. Thomas had migrated from Kentucky in 1813 to the Wood River Settlement Madison County, Illinois and served in the Illinois Rangers during the War of 1812. In the summer of 1818, Thomas, along with Thomas Carlin and John W. Huitt, traveled through present day Kane Township, crossed the Macoupin, and continued on to the timber's edge to a prairie grove and spring on Section 33, Township 10 North, Range 12 West. Here Samuel Thomas built a cabin and returned to Wood River for his family. In November 1818 he and his family arrived by ox cart and settled north of Macoupin Creek. His companion, Thomas Carlin, continued north and built his cabin on what is now the southern portion of Carrollton. In October 1818, Michael and Jacob Headrick, Abram Bush and Jacob Redden came up from the Wood River Settlement and took claims in Section 16, west of Carrollton. When Headrick later realized that Section 16 was to be devoted to the school fund, he moved his family to a farm on the north side of Carrollton.[5]

In 1819 settlements were made north of Apple Creek, in present day White Hall Township, by Thomas, Zachariah and John Allen, Thomas Rattan, James Henderson, Levi Reader, and Isaac Hill. The Allen brothers promptly set about to construct a grain mill, one of the few mills in operation north of Wood River settlement, which was a great convenience to the settlers and did a thriving business. Another group, consisting of William and Larkin Thaxton, Jesse Allen, William Waltrip, Jesse Morrow and others from Madison County established a settlement in the northern part of Greene County at present day Roodhouse. Greenfield, in the east of the county, began in the 1820s with settlements made along Rubicon Creek by Stephen Hand and James Cannedy from

[3] Donnelley, Gassette & Loyd, 235, 238-240.
[4] Ibid. 241.
[5] Ibid. 241-244.

Tennessee. The area grew very slowly until 1835 when George Washington Allen surveyed a town and laid out lots for sale. Allen was also instrumental in having the first mail route from Jacksonville to Alton run through Greenfield. The arrival of rail transportation to Greene County in the 1860s and 1870s was an economic boon to the larger towns in Greene County. The first trains reached White Hall in 1862, Carrollton in 1865, Greenfield in 1870, and Roodhouse in 1871.[6]

2. Carrollton Township and City of Carrollton:

Carrollton Township lies in south central Greene County and occupies the west half of Range 10 West and the east five tiers of sections in Range 11 West in Township 10 North, as well as that portion of the same ranges in Township 9 North lying north of Macoupin Creek. It is bordered on the west by Woodville and Bluffdale townships, on the north by New Providence Township, on the east by Greenfield and Eastern townships, and on the south by Macoupin Creek and Kane Township. Macoupin Creek forms the southern border of Carrollton Township and every section along the southern border is fractional. The township is drained to the north by tributaries of Apple Creek, and to the south by tributaries of Macoupin Creek. In between these two drainages lay rolling prairie land on the edges of which the first settlements in Carrollton Township were made in the spring of 1818 by Samuel Thomas, A. Headrick, and Thomas Carlin. They were joined in 1819 by F. M. Bell, in 1820 by Jacob and Martin Bowman, and Silas and Ruth Eldred, and in 1821 by David Pearson, J. B. Eldred, Caroline Black, Daniel Morfoot and Thomas Ward.[7]

The City of Carrollton, county seat of Greene County, was first settled by former Illinois Ranger and future Illinois Governor Thomas Carlin. In the latter part of 1818 Carlin, with his mother and stepfather, came north of Macoupin Creek and built a cabin in the southern part of present-day Carrollton. Several of the earliest settlers of Greene County, including Michael Headrick, Samuel Thomas and Abram Sells, settled on nearby claims. In January 1821, the Illinois General Assembly in Vandalia passed legislation calling for the organization of Greene County, and an elected commission located the county seat on land owned by Thomas Carlin. In autumn 1821 the town of Carrollton was surveyed and platted around a public square laid out for county government and commercial purposes. The population of Carrollton soon increased with the arrival of Jacob Fry, Thomas Rattan, Samuel Lee, and many others. The first structures were rude affairs: a log tavern built on the square by Thomas Rattan, a simple log dwelling constructed by Jacob Fry, and a log frame structure on the west side of the square to serve as the first courthouse. The first frame dwellings around the town square were built by Cyrus Tolman and Charles Gregory. The first merchant in Carrollton was John Skidmore, who sold general merchandise from his store in a building on the town square. Boarding in Mr. Skidmore's

[6] Whiteside, Levi T., "Railroads in Greene County, Illinois", *Rural Railroads, Prelude to Trails to Rails*. (Cunningham, Eileen Smith 1976), 47-51. Donnelley, Gassette & Loyd, 244, 247-248.
[7] Andreas, Lyter, and Company, *Atlas Map of Greene County Illinois*., (Davenport, 1873) 44.

building was Samuel Lee, who served as the first Greene County Recorder, Circuit Clerk, County Clerk, and Justice of the Peace. In the summer of 1832, a cholera epidemic swept through the region and ravaged the populous of Carrollton, taking the wife of Samuel Lee as its first victim. Of the 300 citizens living in Carrollton at the time, 30 died of cholera that summer and many others were sickened or were fully occupied in the care of others. After some time, Carrollton bounced back, and by 1842 the town possessed a blacksmith shop, a general store, a drug store, a harness maker, a drug and grocery store, a steam mill, a grist mill, two attorneys at law, and a newspaper, the *People's Advocate.* In 1849 Carrollton was incorporated as a Town and a Town Board elected, with Chester Gaylord serving as President and Giles H. Turner serving as Clerk. In October 1851, a second newspaper, the *Carrollton Gazette,* reported that the town had a population of 800 inhabitants, and gave a detailed summary of Carrollton's churches, schools, retail and wholesale businesses, and fraternal organizations. Indicative of a building boom the paper reported that many stone and brick masons, brick makers, and plasterers were busily employed in Carrollton.[8] From about 1830 to the middle 1850s the central portion of Carrollton was transformed from a rough-hewn cluster of log and frame buildings to an urban plan of brick and frame commercial structures surrounding the public square. In 1852 John Headrick built a large brick hotel on the west side of the square and George Wright erected a substantial two-story brick building on the north side of the square. Brick commercial buildings constructed from the 1830s into the early twentieth century surrounding the square constitute the bulk of structures contributing to the Carrollton Courthouse Square Historic District, listed on the National Register of Historic Places (NRHP #85001667) on 1 August 1985. The centerpiece of Carrollton's Courthouse Square was and remains the courthouse building itself, a rock-faced and limestone Richardsonian Romanesque structure constructed in 1891-92. [9]

3. Public Water Supply Context

Public water supply systems, employing reservoirs, aqueducts, and gravity, had been developed and utilized by such early and far flung civilizations as pre-Christian Rome and the Aztecs of Meso-America. Early public water supply works were naturally limited by topographical conditions and were dependent upon the principles and effects of gravity. The introduction of artificial or mechanical pumping methods allowed for the development of three general schemes designed to solve the problem of water distribution: the "Gravity", the "Reservoir", and the "Direct" Methods. The Reservoir system, under many designs, involves the mechanical elevation of water from a lower to a higher level, and its storage in basins or reservoirs of sufficient size and elevation to meet all requirements. The Reservoir system ranges in scope from designs for small tanks elevated upon supporting columns to immense reservoirs for the water supply of great cities. In the general scheme of a water supply system, the elevated reservoir serves a dual purpose; providing for a surplus supply to be utilized as required, as well as

[8] Donnelley, Gassette & Loyd, 247, 251-253.
[9] National Register of Historic Places, Carrollton Courthouse Square, Nation Register #85001667.

permitting a temporary suspension of the mechanical operations of the plant. In large cities, reservoirs are developed in topographically elevated regions. In the rural Midwest, small town reservoirs, or water tanks, are first built on elevated land if available, and secondly, raised upon a structure of sufficient height to create adequate pressure required to satisfy community needs.[10]

Municipal water systems were uncommon in nineteenth century United States outside of densely populated urban centers. New York City had created localized reservoir and pumping systems by the 1770s, Philadelphia pumped water from the Schuykill River into elevated wood storage tanks by 1799, and Chicago began pumping Lake Michigan water into elevated wooden tanks by 1842. The oldest complete water system in the United States is believed to have been installed in Bethlehem, Pennsylvania between 1754 and 1761.[11] For much of the nineteenth century, rural American communities obtained most of their water from private wells and other local water sources such as lakes and rivers. By the 1880s, concerns over the supply and quality of water for drinking, washing, and firefighting, led to the development of municipal water storage systems across the country. Many communities were prompted to install municipal water systems after rampant and destructive fires. Fire insurance companies would not insure businesses in communities without sufficient fire protection.[12] Early elevated water storage tanks were usually constructed of iron girded wood with flat bottoms and conical tops. When filled with water, the wooden tanks, or reservoirs, would initially leak. As the wood became saturated, it would swell and effectively seal in the water. Such storage tanks were, and are still, common on rooftops in dense urban settings. Water towers were often constructed of wood, stone, or masonry brick. Several notable examples of early composite elevated water storage tanks are found in Central Illinois. The water tower in Havana, Illinois, constructed in 1889, was designed to create adequate water pressure through gravity flow. It was constructed with a limestone foundation, brick and steel walls, and a metal roof. The 50,000-gallon storage tank was made of steel. The 1887 Paxton Water Tower in Ford County, the 1891 Benson Water Tower in Woodford County, and the 1896 Ransom Water Tower in LaSalle County all used masonry brick for the towers and wood for the storage tanks.[13]

As municipal water systems utilizing elevated storage tanks proliferated and demands became greater, engineers and builders rapidly transitioned to more cost-effective metallic reservoirs and towers constructed with riveted plates and members of iron or steel. Iron was universally employed until about 1890 but with improved manufacturing

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[10] Hazelhurst, J.N., *Towers and Tanks for Water Works. The Theory and Practice of Their Design and Construction* (New York: Wiley Press, 1907), 1-6; Mathis, Gregory R. and John Chlebeck, PE., *Steel Water Towers Associated with South Dakota Water Systems, 1894-1967,* (South Dakota State Historic Preservation Office/ South Dakota State Historical Society, 2012), 7-10.
[11] Hazelhurst, J.N., 5.
[12] National Register of Historic Places, Old Havana Water Tower, National Register #93000325.
[13] Mathis, Gregory R. and John Chlebeck, PE., *Steel Water Towers Associated with South Dakota Water Systems, 1894-1967,* (South Dakota State Historic Preservation Office/ South Dakota State Historical Society, 2012), 15.

processes, iron was supplanted by flexible structural steel as the most suitable material for metallic reservoirs and towers. By 1897, there were more than 3,000 complete municipal water supply plants in the United States. About one third of these were equipped with some form of elevated metallic storage tanks, or reservoirs, more than half of which were constructed after 1890. One of the first and best examples of a modern, elevated, riveted steel tower and tank, supported by 100′ Z-bar columns, stiffened with I beam ties and diagonal tie rods, was constructed in 1898 in Jacksonville, Florida.[14] The basic riveted steel construction design developed for water towers and storage tanks in the 1890s, and exemplified by the 1898 Jacksonville water tower, changed little over the course of the next fifty years. The most typical water tower erected in towns across the American Midwest in the first half of the twentieth century had a 50,000-gallon capacity storage tank atop a 100′ high tower, or trestle, and was of riveted steel construction.[15]

Since water towers are basically elevated water containment tanks, boilermakers traditionally constructed the storage tanks, ironworkers constructed structural components such as beams, struts, and girders, and pipe fitters assembled components that conveyed fluids in motion. By the middle of the twentieth century, and throughout the boom years of water tower construction from 1946 to 1980, two large companies dominated the industry. Between them, the Chicago Bridge and Iron Works (now CBI, Inc.) and the Pittsburg-Des Moines Steel Company (now PDM, Inc.) erected between eight and eleven thousand water towers in the Midwest and Plains regions of the United States. Both large companies worked on all types of storage tanks and vessels, and water towers were a small part of their businesses.[16]

Riveted steel construction remained the standard for water towers until the 1950s, so much so that a tower built in Minnesota in the 1950s might be nearly identical to a tower built in the 1890s in Iowa. Industry leaders, however, were sensitive to criticisms that too many water towers looked monotonously utilitarian. In 1931, Chicago Bridge & Iron Works sponsored a competition to develop designs that would illustrate viable improvements in the appearance of elevated steel tanks and their supporting structures.[17] While many of the submissions represented aesthetic innovations, the most significant change came about in the 1950s with the introduction and widespread use of welding. Weld technology required many changes in construction techniques and expertise, but also made possible expanded forms and designs. The Torospheric Design became popular in the 1950s in populated areas requiring a high capacity water storage system, and featured multi columned towers supporting high capacity tanks, as well as access ladders, catwalks, and handrails. The 1960s saw the introduction of Pedespheres, or Single Pedestal design to replace the traditional lattice support of riveted steel. This in the most common type of water tower used today to replace aging riveted steel tanks and towers.

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[14] Hazelhurst, J.N., 10.
[15] Spreng, Ronald E., 131.
[16] Mathis, Gregory R., 41-42.
[17] Chicago Bridge & Iron Works, *Elevated Tank Designs: Submitted in a Competition* (Chicago: Chicago Bridge & Iron Works, 1931).

The Hydropillar, introduced in 1962, features a large diameter, single enclosed shaft that has become popular for municipal water works because it is considered to be low maintenance.[18]

4. The Carrollton Water Tower and System

From the initial occupation of Carrollton in the 1820s the city's water needs were met with private and public wells until the 1890 construction of a new water delivery system and standpipe.

The 1885 Sanborn Insurance Map indicates that the City of Carrollton relied on private and public wells as their water supply. The map depicts wells associated with private residences and in public locations such as the Courthouse lawn, and in the streets around the Courthouse Square. A "Calaboose", a well, a "Hook and Ladder" building, and a tool shed are depicted at the current location of the Carrollton Water Tower. [19]

By the late nineteenth century, the need for a large, safe, and reliable water system to provide clean drinking water and an ample supply for firefighting was evident in Carrollton. According to the 1905 *Past and Present of Greene County, Illinois*, the city began constructing a new water supply in 1890. A deep well system was constructed by a Mr. Grey of Chicago for a cost of $3,045.00 and was located near the Q. C. & St. Louis Depot. The well produced a large amount of water, and on June 12, 1890 the citizens voted 272 to 75 to issue $20,000.00 in bonds to construct a water works system. George Cadogan Morgan of Chicago built the system for $19,463.00. Included were a 58,000 gallon reservoir a pumping engine, a 116′ high standpipe with a 28,000 gallon capacity, and "…between four and five miles of water mains and hydrants". [20]

The first well drilled for the new system failed because the water tasted like sulfur, and when citizens refused to renew their water contracts with the city, the Carrollton City Council promised $18,000.00 to purchase nearby Dodson Springs to create a new water system. The land was purchased for $500.00 and a large reservoir was constructed, and pumps were installed, to carry the water four miles to the city. The standpipe that proceeded the current water tower was incorporated into this system and the original reservoir was kept full for emergencies. [21]

An examination of the 1924 and 1925 Carrollton City Council Meetings found a chronology of events and actions associated with the new water tower. [22]

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[18] Mathis, Gregory R. and John Chlebeck, PE., *Steel Water Towers Associated with South Dakota Water Systems,* 5.
[19] Sanborn Map and Publishing Company, *Carrollton, Illinois, April 1885*, (New York, 1885).
[20] Miner, Edward, *Past and Present of Greene County*, (Chicago, S.J. Clarke, 1905). 124-125.
[21] Ibid., 126.
[22] Minutes of the Carrollton City Council Meetings, Book 6, (1924-1925), 193, 197, 206, 208, 212, 238.

March 4, 1924: The City Council adopted Ordinance #65 authorizing the issue of $7,000.00 in bonds for the water tower (standpipe) and directed the bond issue be placed on the annual city election on April 15, 1924.

April 17, 1924: The vote for issuing $7,000.00 in bonds for the construction of the water tank and tower was recorded in the newspaper. A total of 632 votes were cast in the city election with 444 voting in favor, and 175 voting against the issue. This tally did not account for thirteen votes (444+175=619).

August 5, 1924: The City Council accepted plans and specifications from Caldwell Engineering Company for the new water tower and directed Caldwell to advertise for bids on August 18, 1924 at 7:00 o'clock PM.

August 18, 1924: The City Council opened bids for the construction of the water tower from Wicker Engineering and Construction, Pittsburg, Des Moines Steel Company, and Chicago Bridge and Iron Works. Chicago Bridge and Iron Works submitted a bid for $9,820, and the City Attorney and City Engineer, J. Caldwell, were directed to enter into a contract with them.

October 7, 1924: The City Council voted to use $4,860.00 of the Water Works fund to be delivered to H.J. Caldwell Engineering Company for payment to Chicago Bridge and Iron Works.

May 29, 1925: The council accepted a $618.00 bid by Phillip Lobsinger of Alton, Illinois, to demolish the old water tower.

Issues of the *Carrollton Patriot* in 1924 and 1925 were examined and provided a similar chain of events with some slight alterations and more detail. The *Carrollton Patriot* was a weekly newspaper, published on Thursdays, that is no longer in business. A log run of the paper has been acquired by the Greene County Historical and Genealogical Society and has been made available to the public. [23]

The Thursday, April 10, 1924 issue of the *Carrollton Patriot* announced that a $7,000.00 bond issue for the construction of a new water tower would be placed on the ballot in the upcoming city election. The article goes on to say that a 100,000-gallon water tank to replace the "…old tower which holds only 27,000 gallons. Under present conditions the tower is usually empty in the early morning, from 3 to 5 o'clock, and the only alternative to provide for fire protection during those hours is to hire a night engineer". The standpipe would usually run dry by 3:00 to 5:00am. Because the salary for a night

[23] *Carrollton Patriot*, "Water Tower Needed; Why Not Vote For It" (March 20, 1924), 1. "Bond Issue Leads In The City Election" (April 10, 1924), 1. "Yes, We Will Build That Water Tower Now" (April 17, 1924), 1. "Old Stone Calaboose Being Torn Down", (July 17, 1924), 1. "The New Tower Will Look Like This", (November 6, 1924), 1. "Its Last Appearance." (June 4, 1925), 1.

engineer would equal the payments for the bonds, the paper predicted that the issue would carry "…by a big vote."

The results were printed following week with all three wards passing the bond issue. The aggregate vote was 444 votes for and 269 votes against the bond issue. The article stated that this was the third attempt at the bond issue, which failed in August 1921 and April 1922. The reason cited for the success this time is that the need for the new water tower was better explained to the voters.

On July 17, 1924 the *Carrollton Patriot's* front page included an image of the calaboose and standpipe in an article entitled "Old Stone Calaboose Being Torn Down". The article stated that the building was erected in 1833 "…as is shown by an inscription over one of the windows…". Clarence Pendt bid $250.00 to demolish the stone building where the new water tower would be built.

An image entitled "New Water Tower Will Look Like This" was printed on the front page on November 6, 1924, and on Thursday, June 4, 1925 the paper announced that Phil Lobsinger submitted the winning bid of $618.00 to tear down the sandstone building that was erected in 1832. The contractor also was responsible for the removal of the brick, boiler iron, and other material, all of which became his property.

As the City of Carrollton grew in population the water distribution system was upgraded and expanded. In 1955, 750 metered services consumed 150,000 to 200,000 gallons per day (gpd), that number grew to 1,125 metered services consuming 323,300 gpd by 1988.[24] Wells and the pump station are located west of the city and will be upgraded as part of the water tower replacement project.

In summary, the current Carrollton Water Tower represents the third generation of water delivery systems in Carrollton. Sources indicate that the replacement of the standpipe was proposed as early as 1921 but was not accepted by the community until 1924. The exact dates of construction were not found during this research, but it is clear that demolition and site preparation were underway during the fourth quarter of 1924 and the new water tower was fully functional by May 1925, when the bid to demolish the standpipe was accepted.

PART II. Structural/Design Information

A. General Statement:

1. **Character:** The Carrollton water tower was designed and built by Chicago Bridge and Iron Works (CBI) in fall 1924 through spring 1925, Contract Number 3027. The design

[24] Woller, Dorothy M., Robert D. Olson, Michael L. Sargent, Ellis W. Sanderson., *Public Ground-Water Supplies in Greene County*. Illinois State Water Survey, (Champaign, 1990), 9.

of the water tower is common to the early through middle twentieth century in the in the Midwest. The water tower offers the first glimpse of most communities to travelers in central Illinois and are one of the most recorded and remembered features of towns and villages. Each water tower represents the historic moment in the towns when they needed to upgrade water delivery systems to satisfy the needs of a growing community. Many of these iconic structures have reached the end of their functional lives and are being replaced by new, larger, water towers.

2. **Condition of fabric:** The exterior of the Carrollton water tower has been well maintained and while surface corrosion is evident on some elements no structural failures were observed. The cost of maintaining the current tower and the need for additional water storage and service are the reasons the steel riveted tower will be replaced.

B. Description:

1. **Materials:** The Carrollton Water Tower is a riveted steel structure with four support columns and a conical roof.

2. **Dimensions:**

   a. Over all dimensions: Water tower occupies an area of approximately 1,082 square feet at base. Tank capacity is 100,000 gallons.

   b. Height: 99′-11-½″ to bottom of bowl, 123′-1/2″ to the top of the tank.

   c. Diameter of Tank: 28′-8-11/12″.

   d. Foundations: The water tower rises from four concrete piers that are 4′-0″ square at ground level. According to the plans, the piers extend 6′-0″ below the ground surface and are 9′-3″ wide at the base. Anchor bolts, 1-3/4″ diameter, extend through foundation piers to connect with riveted steel column boots.

   e. Structural system, framing: The water tower is supported by four steel posts, spaced equidistantly in a square, and set at an angle out from the tank. The posts are riveted to column boots which are bolted to the concrete piers. Each post is comprised of three segments. The 1924 drawings indicate that the bottom post is 35′-9″ long, the middle post is 35′-10 ½″ long, and the upper post is 35′-3″ long. The posts are comprised of two riveted elements that form the 12 x 13-½″ wide posts, with a channel on the outer side of the posts that is braced with 7 x 2″ elements riveted across the channel. The posts are connected to each other by two sets of horizontal 7′-0″ x 9′-8″ steel struts, spaced 35′-10″ apart, that are spliced and riveted to the posts. Additional support is provided by diagonally installed 1 1/4′ square tower rods that are attached to the posts with 10″ turn buckles.

The 10″ diameter inlet pipe is housed within a 48″ diameter riveted steel riser that rests on a 6′-0″ x 6′-0″ concrete pad. The access hatch for the riser is located on the east side. A 4″ diameter steel overflow pipe is bolted to the southwest leg and the access ladder is located on the southeast leg.

The water tank, also constructed from riveted steel plates, has an elliptical bottom and a conical top. All riveted connections are single lines of rivets. The four legs meet the tank at the base of the 24″ wide "standard" balcony. The balcony rail is 42″ high. Above the balcony, in the center of the tank, the name of the town, Carrollton, is painted in large green block letters twice around the tank. The Carrollton Public High School mascot, a green eagle, follows the name on each side of the tank.

f. Roof shape, covering: Conical riveted steel plate roof includes a ladder to an access hatch to the interior.

g. Decorative feature and trim: The name Carrollton and an eagle are painted two times around the water tank.

C. Mechanicals/Operations:

An electric pump is located within the pump house located within the fenced compound. Electrical service is provided from a utility pole located immediately west of the water tower compound. Water is pumped into the tank where it is stored. Water pressure and gravity release the water into the public watermains and is distributed to the community as needed.

D. Site Information:

General setting and orientation: The Carrollton water tower is located on the northwest corner of the intersection of Seventh and South Main streets, one block west of the Courthouse square and business district. A gravel parking area is located on the lot immediately north of the water tower and a private residence is located to the west. The water tower has a north to south orientation and is situated on the boundary between the business district on the east and the residential area on the west. The County Sherriff's building is located immediately south of the water tower and the Fire Department is located on the southwest corner of Seventh and South Main streets.

PART III. SOURCES OF INFORMATION

A. Primary Sources:

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H.L. Caldwell, Caldwell Engineering Company to Dr. W.D. Vedder, Carrollton, August 8, 1924.

Illinois from Chicago Bridge and Iron Works Treasurer to Mr. J.E. Postlewait, City Clerk, August 27, 1924.

H.L. Caldwell, Caldwell Engineering Company to Dr. W.D. Vedder, Carrollton, September 3, 1924.

H.L. Caldwell, Caldwell Engineering Company to Dr. W.D. Vedder, Carrollton, September 11, 1924.

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"Yes, We Will Build That Water Tower Now" *Carrollton Patriot*, April 17, 1924.

"The New Tower Will Look Like This." *Carrollton Patriot*, November 6, 1924.

"Its Last Appearance." *Carrollton Patriot*, June 4, 1925.

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National Register of Historic Places, Old Havana Water Tower, Havana, Mason County, Illinois, National Register #93000325. Illinois Architectural Resources Geographic System, http://gis.hpa.state.il.us/hargis.

The Living New Deal, "Projects in Illinois", https://livingnewdeal.org/us/il/.

Sanborn Map and Publishing Company, *Carrollton, Greene County Illinois*, New York, April 1885. Library of Congress Digital Collections Sanborn Maps, https://www.loc.gov/collections/sanborn-maps.

Spreng, Ronald E., "They Didn't Just Grow There – Building Water Towers in the Post War Era," *Minnesota History,* Vo. 52, No. 4, 1992. https://www.mnhs.org/market/mhspress/minnesotahistory/xml/v53i04.xml

Whiteside, Levi T. "Railroads in Greene County" Rural Railroads, Prelude to Trails to Rails. Cunningham, Eileen Smith ed. (1976). https://greene.illinoisgenweb.org/pdfs/1956railroads.pdf.

Woller, Dorothy M., Robert D. Olson, Michael L. Sargent, and Ellis W. Sanderson, *Public Ground-Water Supplies in Greene County, Illinois*. Illinois State Water Survey, Champaign, 1990. https://www.isws.illinois.edu/pubdoc/B/ISWSB-60-35.pdf.

HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

CARROLLTON WATER TOWER HAER No. IL-1200
Northwest Corner of South Main Street and 7th Street
Carrollton
Greene County
Illinois

INDEX TO BLACK AND WHITE PHOTOGRAPHS

Benjamin Halpern, Photographer, September 2019

IL-1200-1 General view of water tower facing west from main Street

IL-1200-2 General view of water tower facing north from 7th street

IL-1200-3 General view of water tower facing northeast with residences in fore and background

IL-1200-4 General view of water tower facing southwest

IL-1200-5 Detail view of water tower, facing north, water tank, overflow pipe, ladder, and upper portion

IL-1200-6 Detail view of water tower facing northeast, water tank and upper structure

IL-1200-7 Detail view of water tower facing southeast, water tank and upper structure

IL-1200-8 Detail view of water tower looking up, water tank and upper structure

IL-1200-9 Detail view of water tower facing west, lower portion

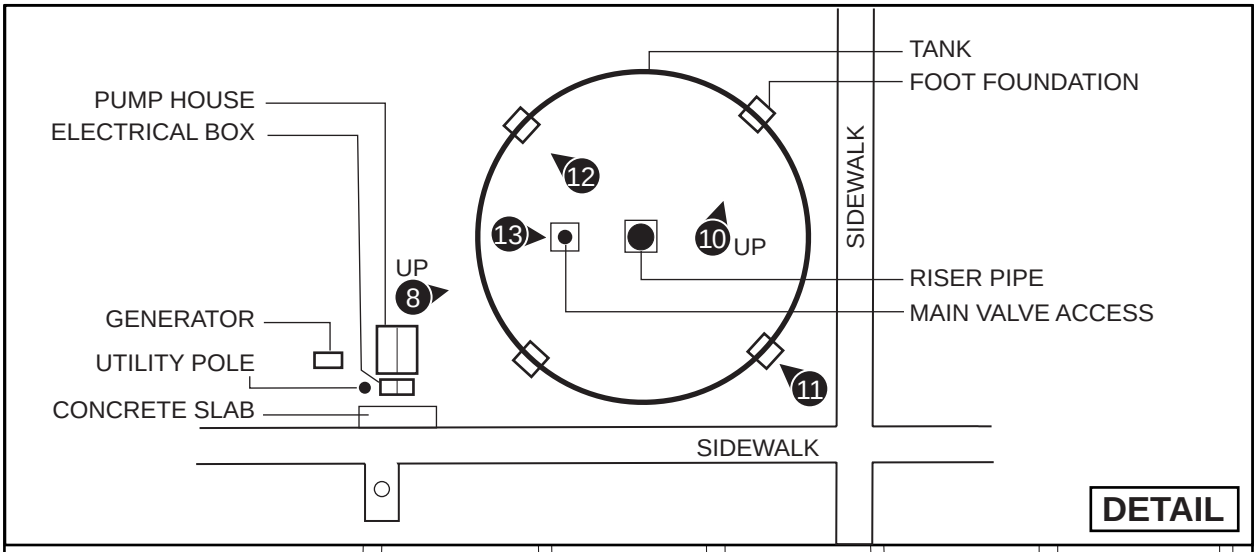
IL-1200-10 Detail view of water tower facing northeast, northeast leg and horizontal strut

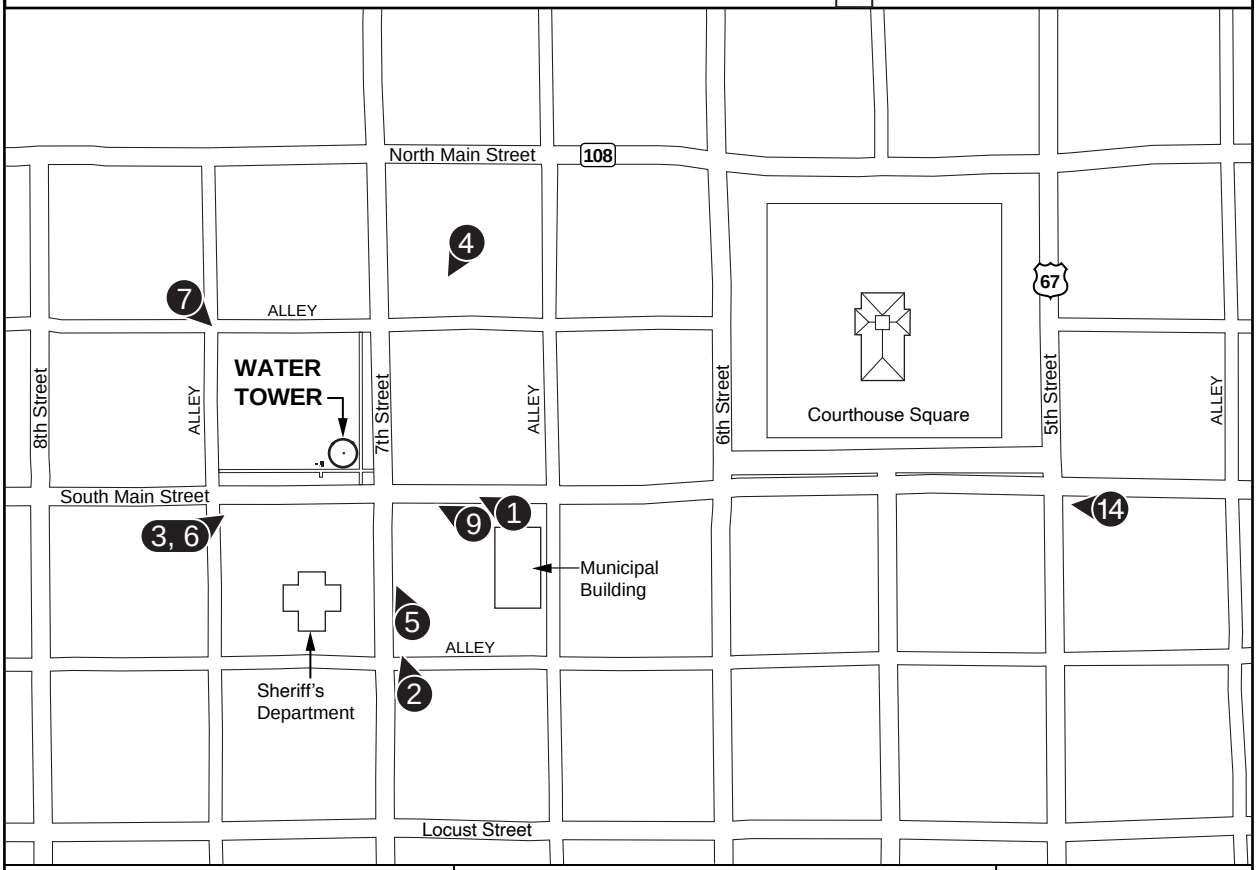
IL-1200-11 Detail view of water tower facing northwest, southeast leg, column shoe, tie rod, turnbuckle, and foundation

IL-1200-12 Detail view of water tower facing northwest, northwest leg, column shoe, tie rod, diagonal bracing, and concrete foundation

IL-1200-13 Detail view of valve vault hatch facing east, LEAVITT MFG. CO., URBANA, IL

IL-1200-14 General view of water tower facing west from courthouse square





CARROLLTON WATER TOWER

NORTHWEST CORNER OF SOUTH MAIN STREET AND 7th STREET
CARROLLTON
GREENE COUNTY
ILLINOIS
62016

◄1 = LOCATIONS OF PHOTOGRAPHS
(#'s 1 TO 14)

N

FEET
0 100 200 400

METERS
0 30 60 120

HAER No. IL-1200

Sheet 1 of 1


CARROLLTON


CARROL
STOP


RROLLTON


ILTON

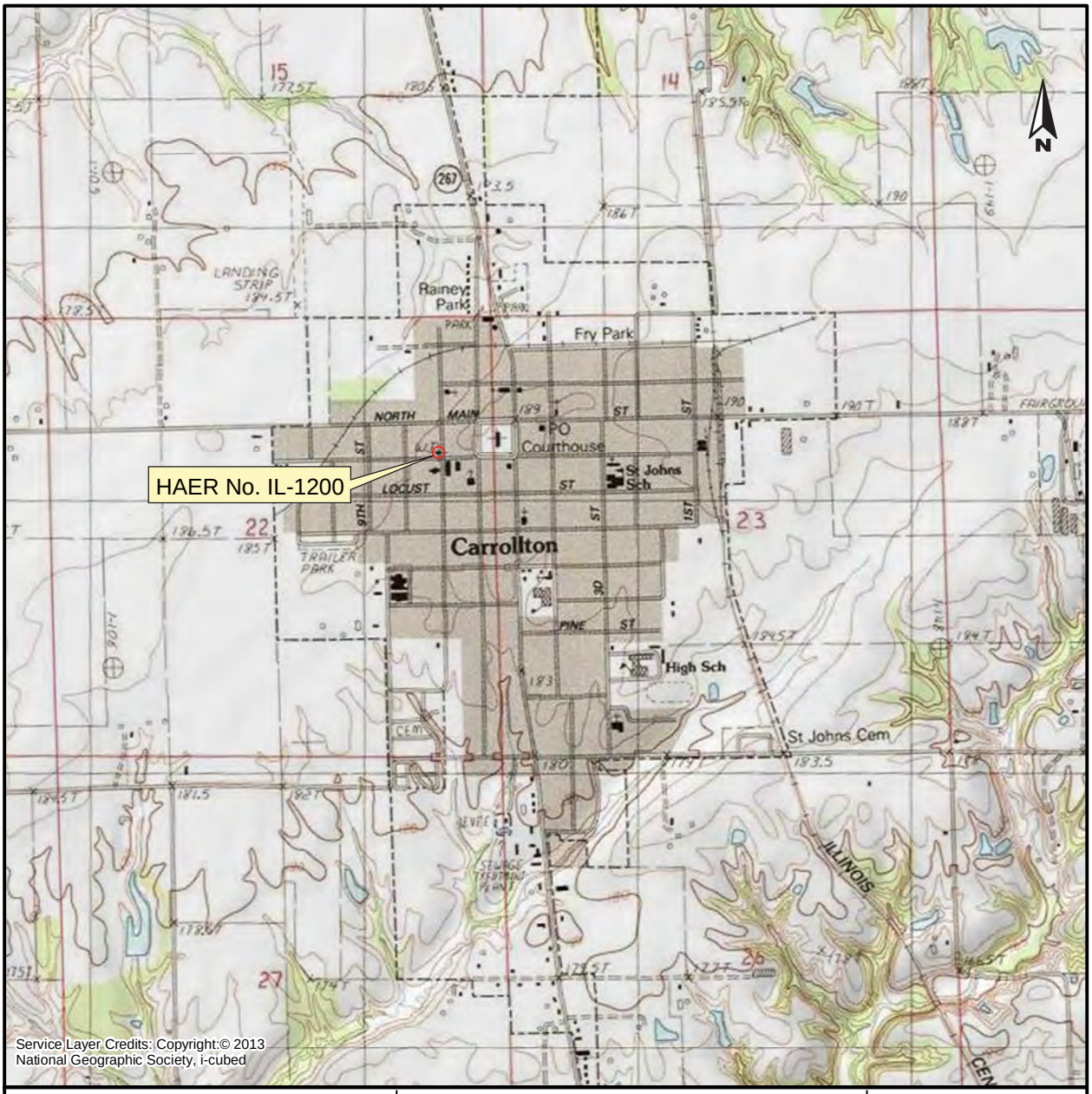

CARROLL


ARROLLTON


CARRO


URBANA
ILL


DAIRY BAR
STOP
25



CARROLLTON WATER TOWER

NORTHWEST CORNER OF SOUTH MAIN STREET AND 7th STREET
CARROLLTON
GREENE COUNTY
ILLINOIS
62016

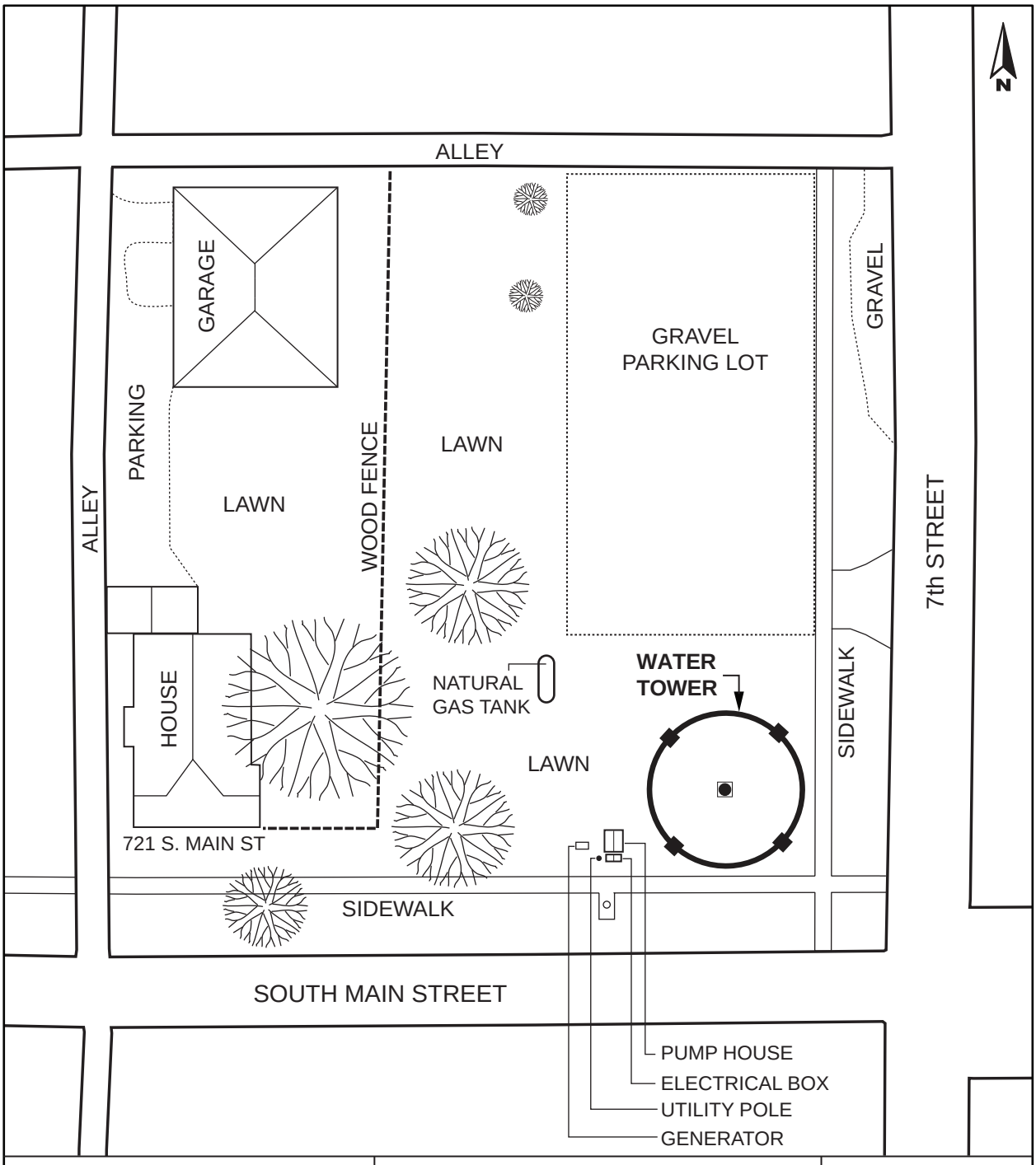
CARROLLTON QUADRANGLE
GREENE COUNTY - ILLINOIS
7.5 MINUTE SERIES (TOPOGRAPHIC)1983

Miles
0 0.125 0.25 0.5

Kilometers
0 0.25 0.5 1

HAER No. IL-1200

Sheet 1 of 1



CARROLLTON WATER TOWER

NORTHWEST CORNER OF SOUTH MAIN STREET AND 7th STREET
CARROLLTON
GREENE COUNTY
ILLINOIS
62016

SITE PLAN

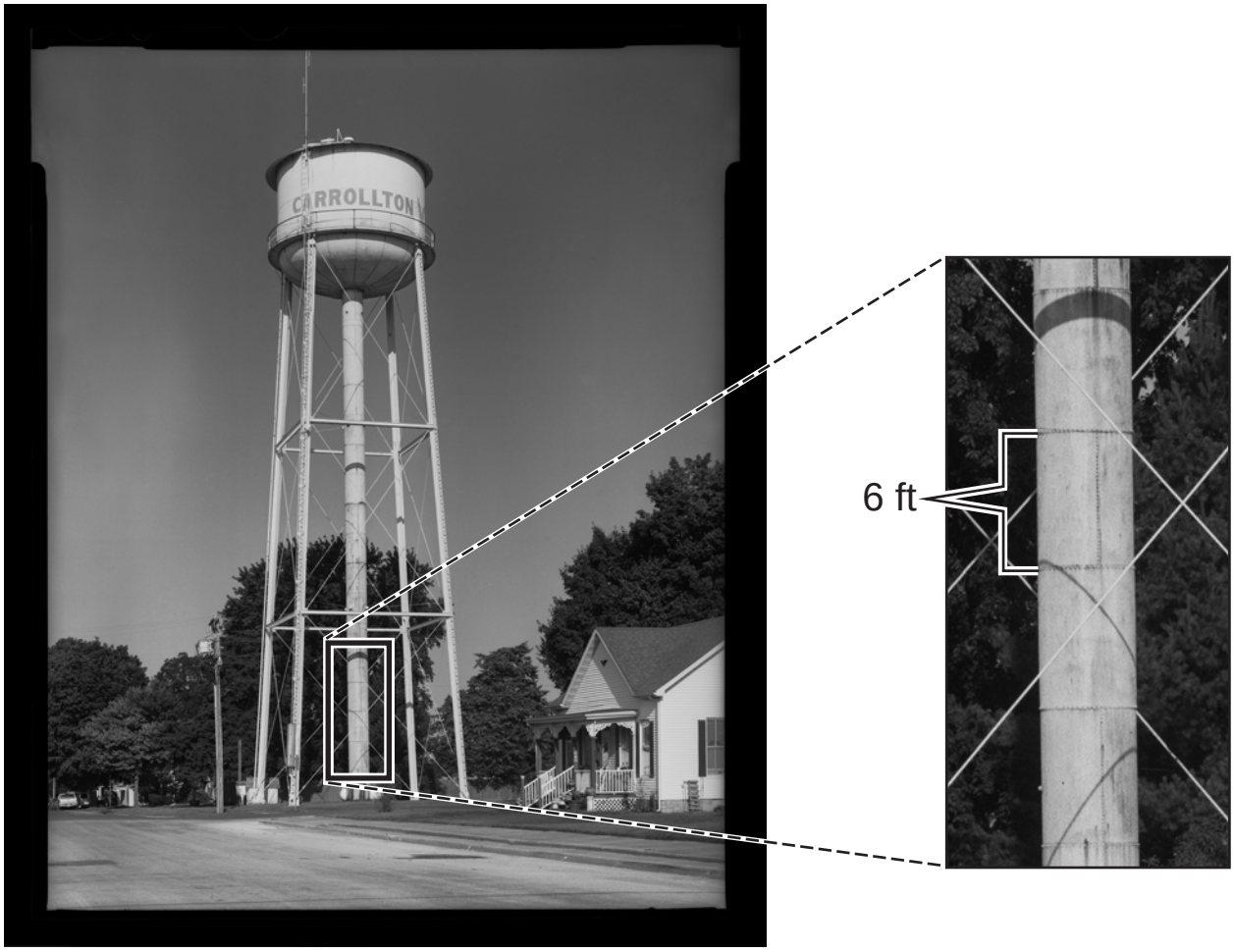
FEET
0 25 50 100

METERS
0 7.5 15 30

HAER No. IL-1200

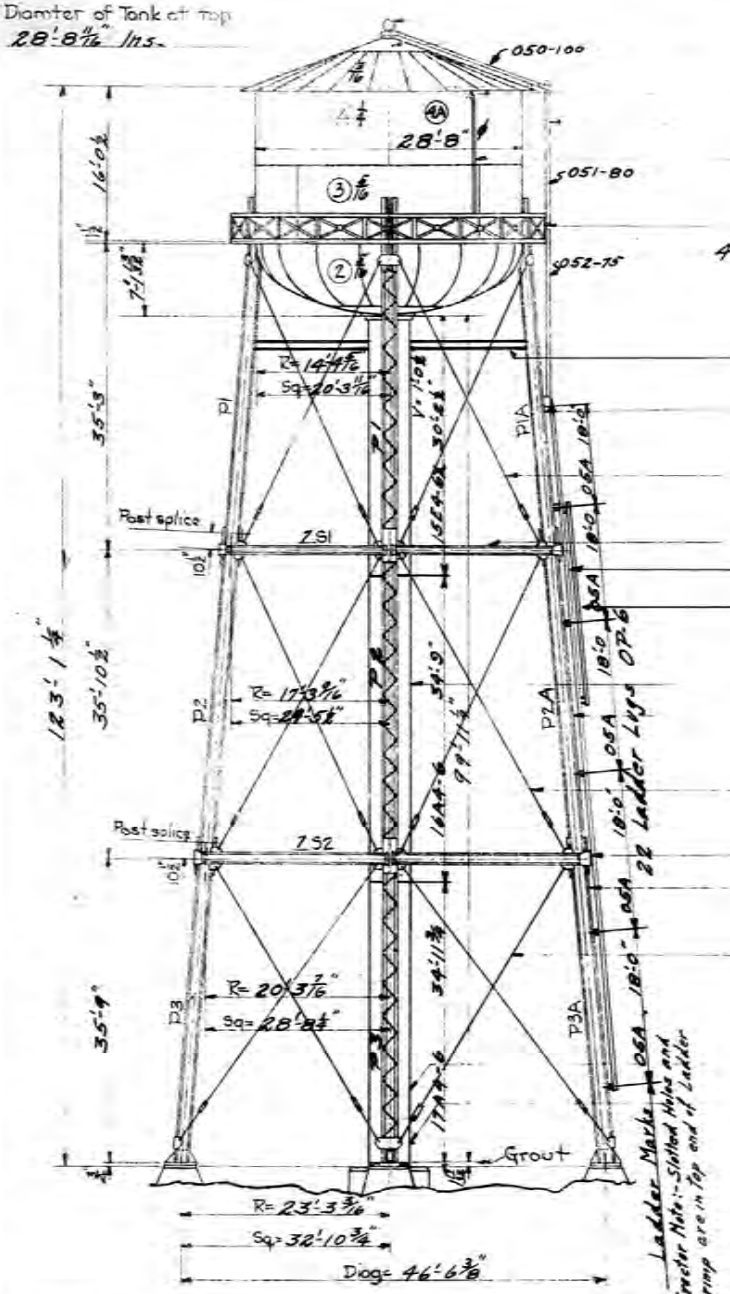
Sheet 1 of 1

INDEX TO SUPPLEMENTAL MATERIALS



HAER No. IL-1200-15
SCALE

FORM ED 53



Std. 12" Finial Patt. No. 501

Std. Conical Steel Roof
(Door in roof to right of ladder.)

Std. 4" C.I. Overflow Patt. No. 1301 Thrd.

Std. Revolving Ladder.

Std. 100,000 Gallon Tank.
28'-8" Diam. x 16'-0½" High.

Std. 24" Balcony and Handrail.

4" C.I. B.&S. Overflow Pipe down 1 Post. We Furnish.

Electric float switch as bids

Special Painters Platform.

4 Posts = 2 ⊟ 12" @ 20.7# x 35'-10½"
1 Cor. Pl. 14 x 3/8 x 33'-5"

8 Tower Rods = 1" x 39'-5¾" B to B

4 Struts = 2 ⊟ 7" @ 9.8# x 24'-6½" bend to bend.

Std. Post Ladder

Std. Indicator
C.B.&I. Wks to Furnish & Conn. Pipe to present Bline.

Std. ¼ Cylinder. 4'-0" Diam x 99'-11¼" high.

4 Posts = 2 ⊟ 12" @ 20.7# x 36'-0"
1 Con Pl. 14 x 3/16 x 36'-0"

8 Tower Rods 1⅛" x 42'-10½" B to B

4 Struts = 2 ⊟ 7" @ 9.8# x 28'-9¾" bend to bend.

4 Posts = 2 ⊟ 12" @ 20.7# x 36'-9 11/16"
1 Cor. Pl. 14 x 3/16 x 35'-7 3/4"

8 Tower Rods = 1⅛" x 44'-9¾" B to B

Inlet Pipe 10" C.I.F. - We Furnish.

Outlet Pipe None - - - Furnish

Std. 12 x 18 Manhole Cover Patt. No. 397

Std. 6" Blowoff Valve

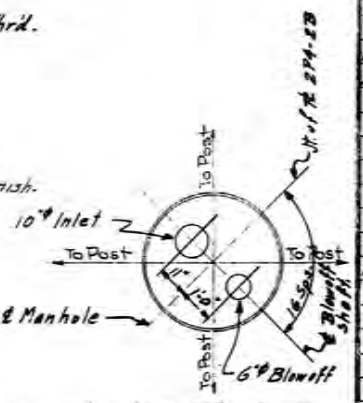
Foundations Std. - We Furnish

4 Anchor Bolts = 1¾" x 6'-0"

2" Bored hole in ctr of shoe.

Inspection: Mill No
Shop No
Field No

Approved by:



Location of Pipe Openings in bottom of cylinder.

2 Manhole Jackets and Indicator Target billed out 4/11/39 under Invoice # 1087

LIST OF DRAWINGS

Folio	Index	Description
	Sheet No. 1	General Plan
	F	Foundation Plan
100-125 EA	100 E1	Figure sheet for Tower
100-125 E	21 A 100	Roof
"	22 A 100	Tank # Drwg 3
"	23 A 100	Balcony & Handr. # Drwg 3
"	24 A 100	Bottom
14-17	15 E 4	Cylinder - Top Section Drwg 2
"	16 A 4	Cylinder - Inter Section
"	17 A 4	Cylinder - Bottom Section
18	18 D 4	Cylinder - Head Plate
100-125 E	25 A 100	Top Post Drwg 2
"	6 A 100	Inter. Post
"	27 A 100	Bottom Post
"	28 A 12	Struts
O	050	Revolving Roof Ladder
O	051	Outside Tank Ladder
O	052	Tank to Post Ladder
O	05	Post Ladder
90	90 6	Indicator
	9-105	Lead Sh
	9-188	Finial
	9-172	Overflow
	9-181	Blowoff
9M	9 M 1	Manhole Cover
	9-210	Foot Ell
	Sheet 2	Special Painters Platform
	Sheet 3	Overflow down 1 Post
	Bill Sh. # 15	Piping Data Ctr. Pier
	F X	Valve Pit
	Bill Sh. # 16	Pipe Strap

PAINT: 1-shop coat Anti-Oxide Paint
1-field coat of Std. Black Graphite. Inside
1-field Coat of Aluminum Paint - Outside.

PATENTED

REVISIONS			
No.	DATE	BY	REMARKS

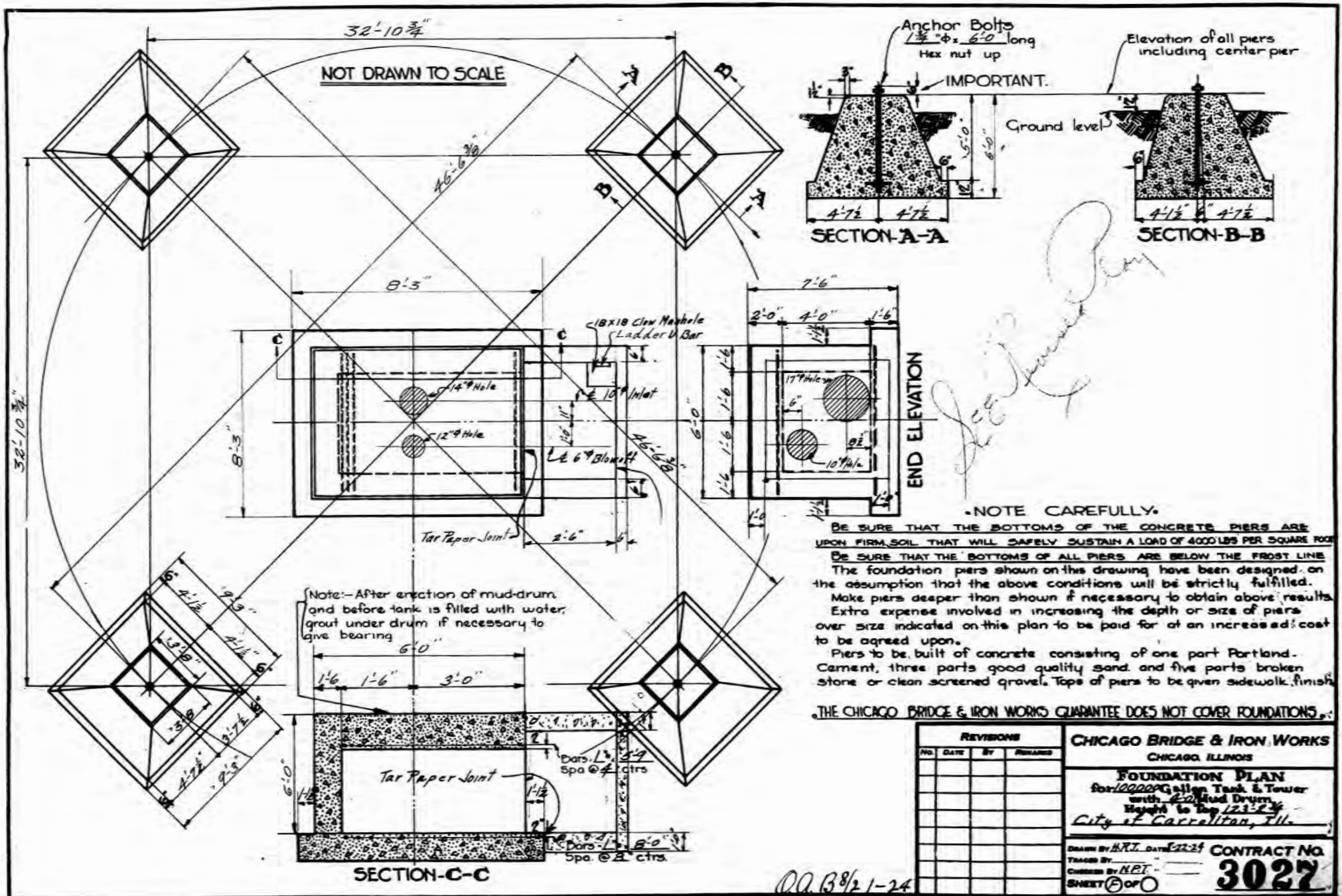
CHICAGO BRIDGE & IRON WORKS
CHICAGO, ILLINOIS

GENERAL PLAN.
100,000 GAL ELEVATED TANK 123'-1¼" TO TOP
FOR City of Carrollton
LOCATION Carrollton - Ill.

DRAWN BY H.R.T. DATE 8-25-37
TRACED BY
CHECKED BY D.C.
SHEET 1 OF 3

CONTRACT No. 3027

HAER No. IL-1200-16



NOTE CAREFULLY.

BE SURE THAT THE BOTTOMS OF THE CONCRETE PIERS ARE UPON FIRM SOIL THAT WILL SAFELY SUSTAIN A LOAD OF 4000 LBS PER SQUARE FOOT

BE SURE THAT THE BOTTOMS OF ALL PIERS ARE BELOW THE FROST LINE

The foundation piers shown on this drawing have been designed on the assumption that the above conditions will be strictly fulfilled.

Make piers deeper than shown if necessary to obtain above results.

Extra expense involved in increasing the depth or size of piers over size indicated on this plan to be paid for at an increased cost to be agreed upon.

Piers to be built of concrete consisting of one part Portland Cement, three parts good quality sand and five parts broken stone or clean screened gravel. Tops of piers to be given sidewalk finish.

THE CHICAGO BRIDGE & IRON WORKS GUARANTEE DOES NOT COVER FOUNDATIONS.

REVISIONS			
No.	DATE	BY	REMARKS

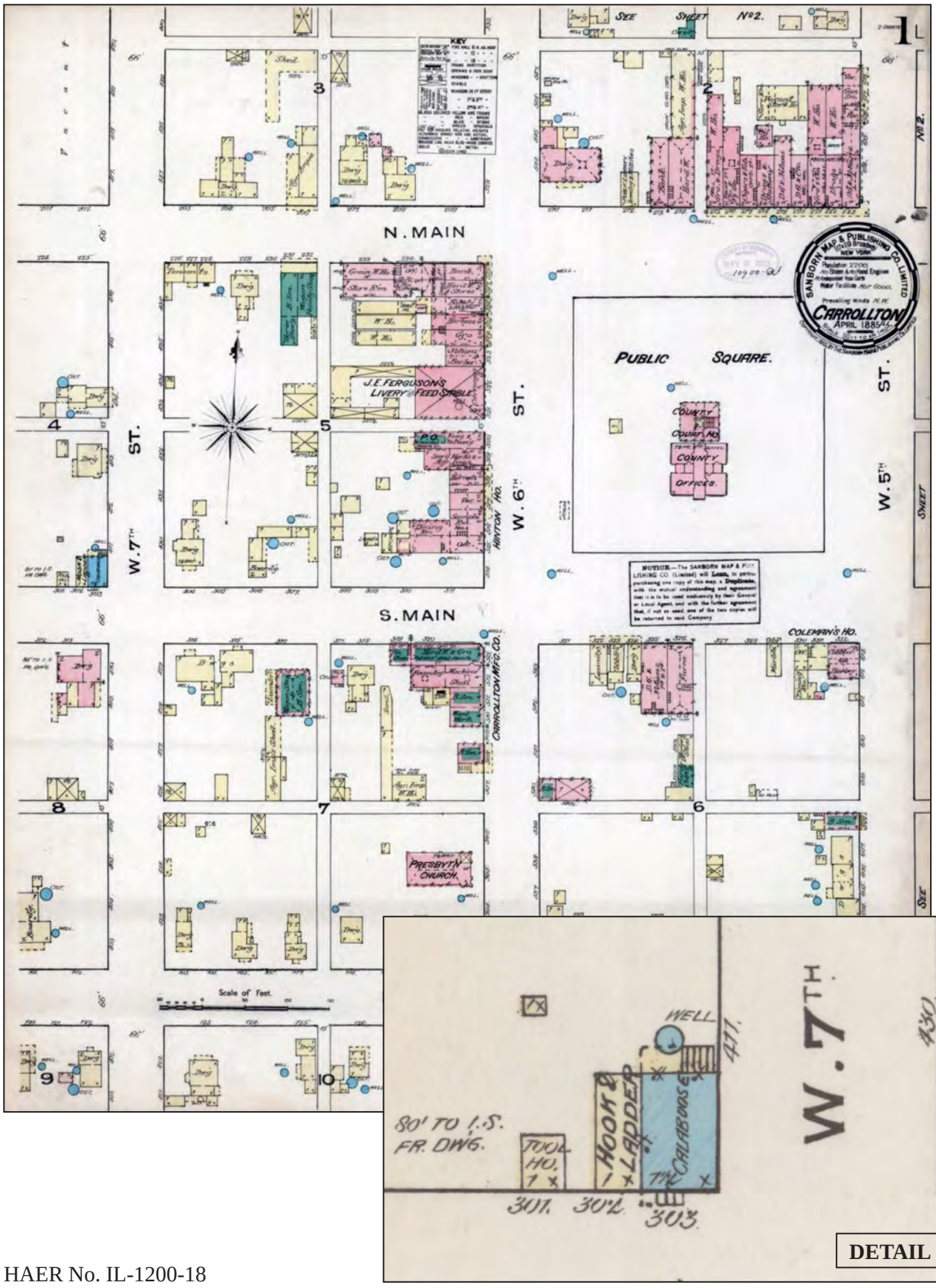
CHICAGO BRIDGE & IRON WORKS
CHICAGO, ILLINOIS

FOUNDATION PLAN
for 100000 Gallon Tank & Tower with Reinforced Drum
Height to Top 123'-2¾"
City of Carrollton, Ill.

DRAWN BY H.R.T. DATE 8-22-24
TRACED BY
CHECKED BY N.P.T.
SHEET F OF O

CONTRACT No. 3027

O.O. 38/21-24



HAER No. IL-1200-18

HAER No. IL-1200-19

HAER No. IL-1200-20

HAER No. IL-1200-21:

Correspondence, 1924

Caldwell Engineering Co.
CIVIL & MECHANICAL ENGINEERING
502-505 AYRES BANK BLDG.
Jacksonville, Illinois

August 8, 1924.

Dr. N. D. Vedder,

Carrollton, Illinois,

Dear Dr. Vedder:-

We are sending you herewith revised set of specifications and revised set of plans. You will note on the plans that we have included a concrete manhole to take care of the two (2) valves just South of the present tower.

You will find a bidder's blank in the back of book of specifications but in the event local bidders want to bid, we will furnish them bidder's blank, from here, upon request. We sent out Notice to the various contractors, Wednesday.

Yours very truly,

CALDWELL ENGINEERING CO.,

By H. L. Caldwell
H. L. Caldwell, Pres't

HLC/M

P.

INFILCO ORDER NO. 30A-4033

ITEM NO. 1

SHEET NO. 1 REV.

DATE 5-27-60 BY ISB

NO. REQ'D	PART NO.	PRINT NO.	DESCRIPTION OF PART	BUY	REQ. NO.	WORK DASH	SHIP DIRECT	DATE SHIPPED
		Y30-4033-1	Raw Water Controller:					
1			5 "Fisher type 657-AR diaphragm operated regulating valve, globe body, 125 # A.S.A. flanged ends, direct single seated, V-port, iron body, S.S. trim, tight closing, spring close, pressure open. Capacity 350 G.P.M. Water at 65°F. Max. line press. 13 p.s.i. Min. line press. 7 p.s.i. Outlet press 2 p.s.i. Drop across valve about 5 p.s.i. Press. on diaphragm about 25 p.s.i. water.	P	Po 5410		V	7/20
			G4-6					
1			6"x5" - 90° reducing ell C# 545 - Flanged - 125# ASA - C.I. - F. & D.		ES-E4-52			6/13
1	12008-R		5" ring gasket CIRC					
8			3/4" x 3" lg. M.B. SET					
			Item Complete					

CHICAGO BRIDGE & IRON WORKS

STEEL-TANKS

SHOPS:
EASTERN: GREENVILLE, PA.
CENTRAL: CHICAGO, ILL.
CANADIAN: BRIDGEBURG, ONT.

CABLE ADDRESS
"CHIBRIDGE CHICAGO,"
"CHIBRIDGE NEWYORK,"
ALL STANDARD CODES

105TH AND THROOP STREETS

CHICAGO, ILL.

SALES OFFICES:
CHICAGO, ILL. — ATLANTA, GA.
NEW YORK, N.Y. — SEATTLE, WASH.
DALLAS, TEX. — SAN FRANCISCO, CAL.
JACKSONVILLE, FLA. — BRIDGEBURG, ONT.
MONTREAL, QUE.

August 27th, 1924

Mr. J. E. Postlewait, City Clerk,

Carrollton, Illinois.

Dear Sir: In reply quote #3027:

Since we frequently have encountered difficulties regarding payments when contracting with municipalities, we trust that there will be no objection on your part to giving us full information concerning the financial arrangements which have been made to pay for the 100,000 gallon elevated steel tank to be erected by us.

Will you kindly tell us, therefore, whether the full amount of $9820.00 is now on hand ready to be drawn as the payments become due and available for no other purpose? If the money is not now on hand, please advise us how the money is to be raised, whether by bond issue, borrowing or tax levy.

We believe that everything has been properly attended to, but in order that there may be no misunderstanding later, and so that we may have the requisite data for our files, we trust that you will send us the above requested information together with any other which you may have as soon as possible.

Very truly yours,

CHICAGO BRIDGE & IRON WORKS

BY H. B. Hanlon
Treasurer.

HBH/H

All of the money is not on hand at this time, but will be paid your firm as quickly as payments are due. Bonds were voted last April + the money will all be available on or before Sept. 30th 1924.

Caldwell Engineering Co.
CIVIL & MECHANICAL ENGINEERING
502-505 AYRES BANK BLDG.
Jacksonville, Illinois September 3, 1924

Dr. N. D. Vedder,
Carrollton, Illinois, RE: CARROLLTON WATER WORKS

Dear Dr. Vedder:-

Enclosed you will please find a set of specifications in which is bound a copy of Proposal and copy of Contract. Said Contract signed by the Chicago Bridge & Iron Works and also bound in the same is copy of Bond signed by Chicago Bridge & Iron Works and also by the United States Guaranty Company.

This copy is to become the official copy for the City of Carrollton. We are also enclosing two extra copies of Contract which you will please have the Mayor and the City Clerk sign and return them to us, together with the set of specifications which you have on hand. We will then correct that set of specifications which you have and send them, together with the signed contracts to the Chicago Bridge & Iron Works.

Yours very truly,

CALDWELL ENGINEERING CO.,

By H. L. Caldwell, Pres't

HLC/R

Caldwell Engineering Co.
CIVIL & MECHANICAL ENGINEERING
502-505 AYRES BANK BLDG.
Jacksonville, Illinois

September 11, 1924.

Dr. N. D. Vedder,

Carrollton, Illinois,

RE: CARROLLTON WATER WORKS.

Dear Dr. Vedder:-

We are, to day, in receipt of a letter from the Chicago Bridge & Iron Works in which they say they have received a letter from the chairman of the finance committee in which he states that fifteen (15) days have elapsed and work has not yet begun on the foundation.

I do not know who is chairman of the finance committee but apparently they are misconstruing the specifications slightly, as the specifications state that work shall be started within fifteen (15) days after the date of the contract. The specifications do not say that the foundation shall be started but simply that the work shall be started, and that part of the specifications has been complied with because the detailed drawing for this job has been completed and checked by our office, then returned to Chicago for corrections and then approved.

We are advised that fabrication would start immediately after the return of the final drawing and this was done September 8th, so no doubt complete compliance with the contract and specifications is thus far being obtained.

If the foundations are completed by the middle of October that will be in plenty of time.

Yours very truly,

CALDWELL ENGINEERING COMPANY,

By H. L. Caldwell, Pres't.

HLC/R

We are herewith enclosing you the City's copy of the Contract and specifications.

HAER No. IL-1200-22

HAER No. IL-1200-23

HAER No. IL-1200-24

HAER No. IL-1200-25

HAER No. IL-1200-26

HAER No. IL-1200-27

HAER No. IL-1200-28

HAER No. IL-1200-29

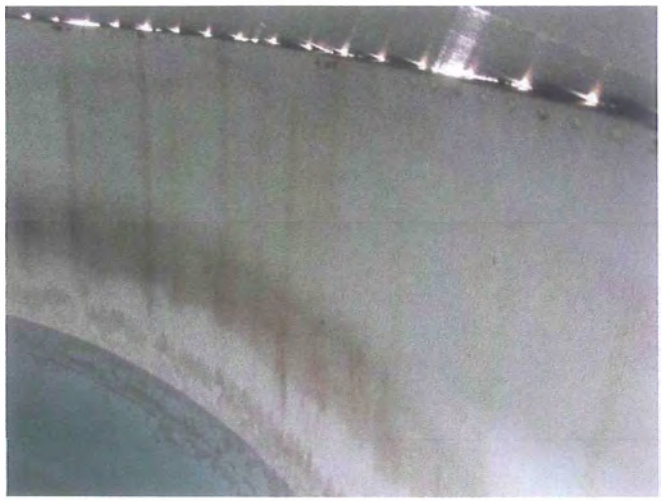
HAER No. IL-1200-30

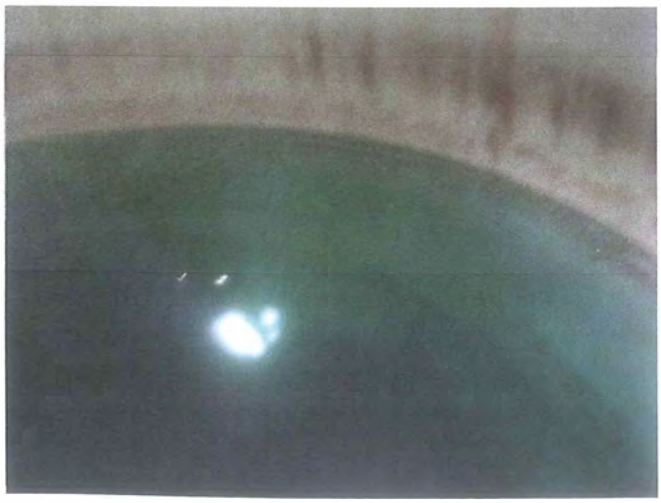
HAER No. IL-1200-31a-g:

Inspection Report Images, 2015

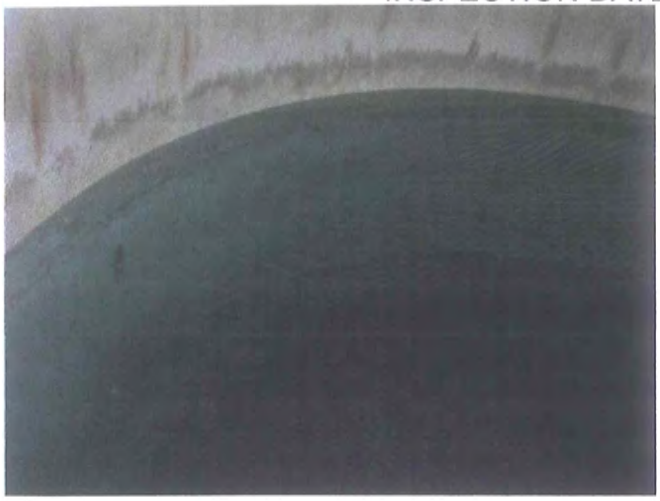
CARROLLTON, IL
7TH STREET - 150,000 GALLON ELEVATED
INSPECTION DATE - FEBRUARY 11, 2014



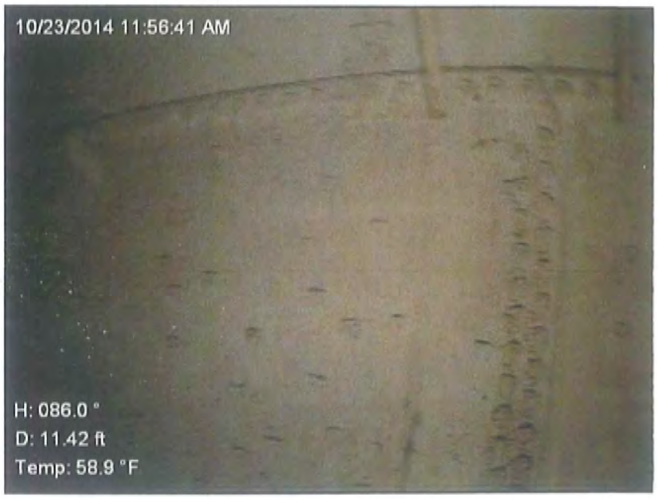





CARROLLTON, IL
7TH STREET - 150,000 GALLON ELEVATED
INSPECTION DATE - FEBRUARY 11, 2014



CARROLLTON, IL
7TH STREET - 150,000 GALLON ELEVATED
INSPECTION DATE - FEBRUARY 11, 2014



CARROLLTON, IL
7TH STREET - 150,000 GALLON ELEVATED
INSPECTION DATE - FEBRUARY 11, 2014

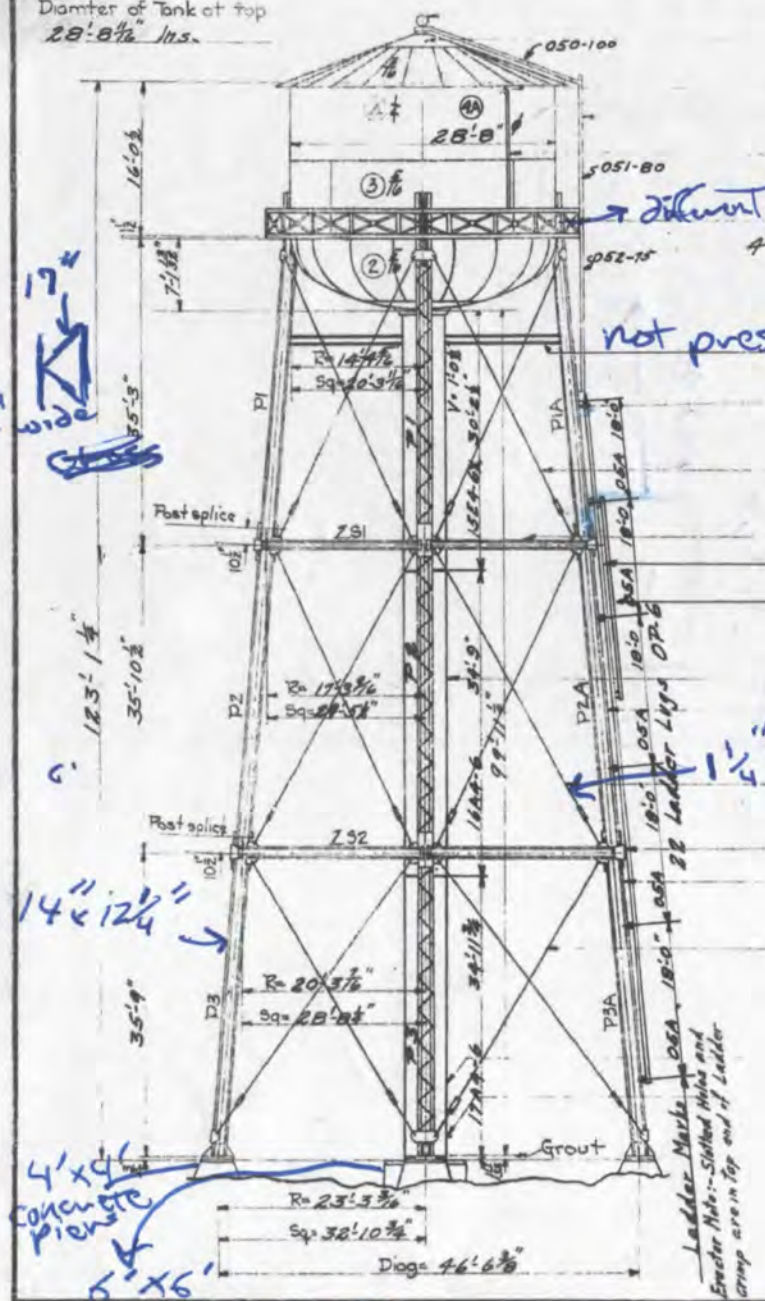
CARROLLTON, IL
7TH STREET - 150,000 GALLON ELEVATED
INSPECTION DATE - FEBRUARY 11, 2014

CARROLLTON, IL
7TH STREET - 150,000 GALLON ELEVATED
INSPECTION DATE - FEBRUARY 11, 2014

CARROLLTON, IL
7TH STREET - 150,000 GALLON ELEVATED
INSPECTION DATE - FEBRUARY 11, 2014

REVISED

Diamter of Tank at top
28'-8½" Ins.



Std 12'Finial Patt. No 501
Std Conical Steel Roof
(Door in roof to right of ladder.)
Std. 4"ø C.I Overflow Patt. No. 1301 Thrd.
Std. Revolving Ladder.
Std. 100,000 Gallon Tank.
28'-8" Diam. x 16'-0½" High.
Std. 24" Balcony and Handrail.
4"ø C.I. B&S. Overflow Pipe down 1 Post. We Furnish.
Electric float switch
not present
Special Painters Platform.

4 Posts = 2 ▯ 12"@ 20.7# x 35'-10½"
1 Cov Pl. 14 x ⅜ x 33'-5"

8 Tower Rods = 1" ø x 39'-5⅜" B & B

4 Struts = 2 ▯ 7"@ 9.8# x 24'-6½" bend to bend.

Std. Post Ladder

Std. Indicator
C.B & I Whs to Furnish & Conn. Pipe to present 8 line.

Std. ♯ Cylinder. 4'-0" Diam x 99'-11¼" high.

4 Posts = 2 ▯ 12"@ 20.7# x 36'-0"
1 Cov Pl. 14 x 7/16 x 36'-0"

8 Tower Rods 1⅛" ø x 42'-10½" B & B

4 Struts = 2 ▯ 7"@ 9.8# x 28'-9½" bend to bend.

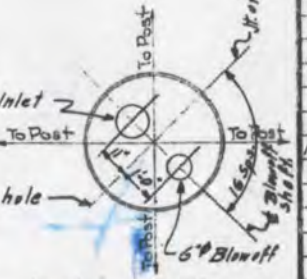
4 Posts = 2 ▯ 12"@ 20.7# x 36'-9 11/16"
1 Cov Pl. 14 x 7/16 x 35'-7 ¾"

8 Tower Rods = 1⅛" ø x 44'-9⅜" B & B

Inlet Pipe 10"ø C.I.F. - We Furnish.
Outlet Pipe None - - - Furnish
Std. 18 x 18 Manhole Cover Patt No 397
Std. 6" Blowoff Valve
Foundations Std. - We Furnish
4 Anchor Bolts = 1½" ø x 6'-0"
2"ø Bored hole in ctr. of shoe.

Inspection { Mill We
Shop We
Field We

Approved by:



Location of Pipe Openings in bottom of cylinder.

2 Maydole Hatchet and Indicator Target bidded out 4/11/39 under Medal bid #1087

PAINT: 1-shop coat Anti-Oxide Paint
1-field coat of Std. Black Graphite. Inside
1-field Coat of Aluminum Paint - Outside.

LIST OF DRAWINGS

Folio	Index Sheet ♯	Description
	F	Foundation Plan
100-125EA	100E1	Figure sheet for Tower
100-125E	21A100	Roof
"	22A100	Tank & Drwg 3
"	23A100	Balcony & Handr. & Drwg 3
"	24A100	Bottom
14-17	15E4	Cylinder - Top Section - Drwg 2
"	16A4	Cylinder - Inter Section
"	17A4	Cylinder - Bottom Section
18	18D4	Cylinder - Head Plate
100-125E	25A100	Top Post Drwg 2
"	6A100	Inter. Post
"	27A100	Bottom Post
"	28A12	Struts
O	050	Revolving Roof Ladder
O	051	Outside Tank Ladder
O	052	Tank to Post Ladder
O	05	Post Ladder
9D	9D6	Indicator
	9-105	Lead Jt
	9-188	Finial
	9-172	Overflow
	9-181	Blowoff
9M	9M1	Manhole Cover
	9-210	Foot Ell
	Sheet 2	Special Painters Platform
	Sheet 3	Overflow down 1 Post
	Bill Sh. ♯ 15	Piping Data Ctn. Piers
	FX	Valve Pit
	Bill Sh. ♯ 16	Pipe Strap

PATENTED

REVISIONS			
No.	Date	By	Remarks

CHICAGO BRIDGE & IRON WORKS
CHICAGO, ILLINOIS

GENERAL PLAN.
100000 GAL ELEVATED TANK 123'-1½" TO TOP
FOR City of Carrollton
LOCATION Carrollton - Ill.

DRAWN BY H.R.T. DATE 8-26-38 CONTRACT NO.
TRACED BY
CHECKED BY P.L. Erected
SHEET 1 OF 3

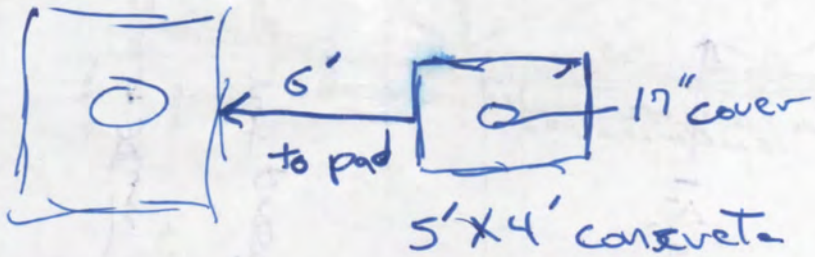
3027

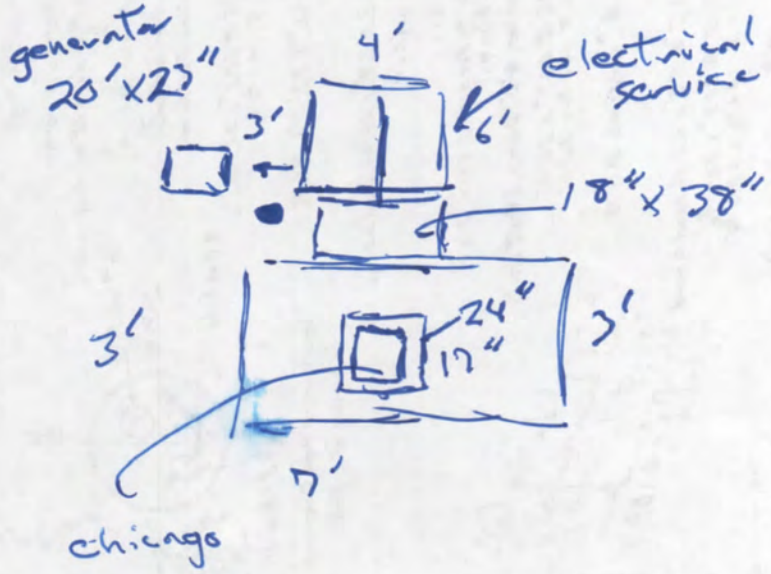
concrete pad

26'

concrete Piers


Wood Fence
Alley
Garage
House
gravel Parking lot
natural gas tank
K1
K2
W
3
220'
S Main St
S Main St
7th St
7th St
7th St
Sheriff
0
50
100
150 feet


6'
to pad
17" cover
5'X4' concrete


generator
20'X23"
4'
electrical
service
3'
6'
18" X 38"
3'
24"
17"
3'
7'
chicago

Google Maps

Imagery ©2019 Google, Imagery ©2019 Maxar Technologies, Map data ©2019 20 ft

(1) Plywood sided pump house

(2) Wood electrical service box

(3) utility pole

(4) Briggs & Straton generator (back up)